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ELLEN S. MANDELL
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LOUISE CYBULSKI *
JENNIFER L. RICHTER
L. CHARLES KELLER *

* NOT ADMITTED IN D.C.

ROBERT LEWIS THOMPSON
GREGG P. SKALL
E. THEODORE MALLYCK
OF COUNSEL

FREDERICK W. FORD
1909-1986

TELECOPIER (202) 296-5572

June 1, 1994

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
Washington, D.C. 20554

Re: KQSC (FM) [formerly KIQS-FM)
Petition for Rule Making
MM Docket 94-29
Attn: Ms. Nancy Joyner
Room 8324 (2025 M Street)

Dear Mr. Caton:

Transmitted herewith on behalf of Pacific Spanish Network, Inc. is an original and four copies of Comments with respect to the referenced Rule Making.

Sincerely,

Robert Thompson

Robert Lewis Thompson

Enclosure

cc: Jaime Bonilla Valdez (w/o encl.)
Brett Miller " "
Larry Morton " "

ORIGINAL

Before the
Federal Communications Commission
Washington, D.C. 20554

In re Matter of	)	MM DOCKET No. 94-29
	)	
Amendment of Section 73.202(b)	)	
Table of Allotments	)	
FM Broadcast Stations	)	
	)	
(Willows and Dunnigan, CA)	)	
	)	
	)	
	)	

To: Chief, Allocations Branch

COMMENTS OF PETITIONER

Pacific Spanish Network, Inc. ("PSN"), petitioner's successor-in-interest [1/], respectfully submits these comments in support of the proposed Rule Making, whereby Channel 288B1 would be substituted for Channel 288A at Willows, CA, and Channel 288B1 would be reallocated from Willows to Dunnigan, CA.

As the licensee of KQSC (FM) at Willows, CA [formerly KIQS-FM] [2/], PSN fully supports the proposal. If the allotment of the upgraded channel and the change of communities is granted by the FCC, the licensee will promptly apply for the upgraded facility. Once the CP for the new facility is granted, PSN will promptly construct the new facility at Dunnigan, CA.

[1/] By letter dated April 19, 1994, the undersigned reported to the FCC that an assignment of license for KIQS (FM) from KIQS, Inc. to Pacific Spanish Network, Inc. ("PSN") had been consummated. Accordingly, PSN has succeeded to the interests of Petitioner for purposes of this Rule Making.

[2/] The FCC approved a call sign change to KQSC (FM) by letter dated April 22, 1994.

Moreover, the information requested by the FCC [3] is provided in the attached Engineering Report. [4] The engineering studies confirm that the public interest would be served by granting the Petition and making the new allotments.

Respectfully submitted,

Robert Lewis Thompson
PEPPER & CORAZZINI, L.L.P.
1776 K Street, N.W., Suite 200
Washington, D.C. 20006
(202) 296-0600

June 1, 1994

Counsel for PSN

---

[3] See NPRM, at ¶ 5.

[4] For the convenience of the FCC staff, the engineering exhibits refer to the existing station as "KIQS-FM", rather than the new call sign, "KQSC (FM)."

ENGINEERING EXHIBITS IN SUPPORT OF COMMENTS TO NOTICE OF PROPOSED RULE MAKING

May 27, 1994

Radio Station KIQS-FM
KIQS, Inc.
FM Channel 288B1 ▫ 105.5 Megahertz
Dunnigan, California

TELECOMMUNICATIONSENGINEERS
LAWRENCE L. MORTON ASSOCIATES
1231 MESA OAKS LANE
MESA OAKS, CALIFORNIA 93436-2309
(805) 733-4275 / FAX (805) 733-4793

TABLE OF CONTENTS

EXHIBIT E-1
ENGINEERING STATEMENT

The information and data contained within these Engineering Exhibits were prepared on behalf of Pacific Spanish Network, Inc., licensee of FM broadcast station KQSC(FM), formerly and hereinafter KIQS-FM, 105.5 Megahertz, Channel 288A, in support of comments to Notice of Proposed Rule Making, MM Docket No. 94-29, released April 15, 1994.

I. DISCUSSION

In Paragraph Five of the Notice, the Commission requested additional information from the petitioner concerning existing aural broadcast services within the proposed gain and loss areas. This report serves to address these issues and provide the requested information.

Exhibit E-2 is a map showing the KIQS-FM, BMLH-931202KH, 60 dBμ service contour at Willows and the 60 dBμ contour from a hypothetical Class B1 facility from the proposed allotment reference coordinates for Dunnigan. The allotment reference coordinates are:

North Latitude: 38 degrees, 55 minutes, 34 seconds
West Longitude: 121 degrees, 54 minutes, 10 seconds

For each FM station presented in these exhibits, terrain elevation data from three to sixteen kilometers on radials spaced at five-degree azimuthal intervals starting with True North were extracted from the computerized thirty-second point elevation database version of **Elevation Data For North America**, available from the Department of Commerce, National Geophysical Data Center, National Oceanic and Atmospheric Administration. A total of 131 points along each radial were linearly interpolated according to § 73.312(d).

The height above average terrain along each of the 72 radials was computed by averaging the elevations between three and sixteen kilometers below the antenna radiation center in accordance with § 73.313(d)(3).

The locations of the 60 dBμ F(50,50) service contours were calculated according to the computer methods outlined in F.C.C. publication PB-249144, **Field Strength Calculations For TV And FM Broadcasting**. The computer methods use digitized data taken directly from the graph of § 73.333 Figure 1. Intermediate values are obtained using bivariate interpolation techniques for surface fitting.

Note that, in the Petition for Rule Making, the petitioner had used terrain data extracted from the Defense Mapping Agency three arc-second point elevation database along one-degree azimuthal intervals to determine the KIQS-FM contours from Willows and Dunnigan. In this study, however, thirty-second terrain data were used to determine the extent of the contours from other aural broadcast services. Therefore, for consistency, the KIQS-FM Willows and Dunnigan contours as represented herein were determined using the thirty-second terrain

database. Thus, slight differences exist in the areas and populations contained within the KIQS-FM contours from those represented in the original petition. Exhibits E-13A and E-13B tabulate the areas and populations within the Willows and Dunnigan contours, respectively, as determined using the thirty-second terrain data.

II. LOSS AREA

A study was conducted to determine the number of AM and FM stations that provide full-time aural broadcast service to the area contained within the KIQS-FM 60 dBμ service contour at Willows. Exhibit E-2 shows that the loss area associated with the proposed KIQS-FM upgrade is the entire area enclosed within this contour.

Pursuant to footnote five of the Notice, full-time AM reception service is defined by the station's nighttime interference-free contour for non-Class A stations, and by the 0.5 mV/m groundwave contour for Class A stations. Exhaustive nighttime interference studies were performed for all of the full-time AM facilities within the vicinity of the KIQS-FM 60 dBμ contour to determine those AM stations that provide service to the area. Note that the KIQS-FM sister station, KIQS(AM), is not among the list of stations that provide full-time service because KIQS(AM) operates during daytime hours only.

Also studied were the 60 dBμ contours of all FM stations in the area to determine those that provide some overlap to the KIQS-FM contour at Willows. Exhibit E-9 tabulates the list of stations that provide aural broadcast reception within the service contour produced by the KIQS-FM facility at Willows.

Exhibit E-3 shows the KIQS-FM service contour from the Willows facility, and the service contours of the AM and FM stations that provide aural service within the proposed loss area. Exhibits E-5A through E-5E are a series of "spaghetti" maps showing the proposed loss area and the contours of the aural service providers. Shading is used to represent the areas that receive a specific number of aural broadcast services corresponding to the number indicated in the title block of the map. Exhibit E-7 tabulates these data and indicates the land areas and populations within the identified regions.

The results of this study indicate that the proposed change in principal community will not create any white or gray areas. In fact, every person residing within the proposed loss area will continue to receive at least nine aural reception services and over 76 percent of the population will continue to receive eleven services.

However, in the event that a suitable expression of interest is received from a party desiring to provide additional service to Willows and the surrounding area, there are two alternate channels, 272A and 292A, that can be allotted to the community with site restrictions. Exhibits E-12A and E-12B show the fully spaced areas to locate these Class A channels for compliance with the spacing requirements of § 73.207. Furthermore, an applicant could available itself of the provisions of § 73.215 in order to expand the area in which an acceptably spaced transmitter site could be located.

III. GAIN AREA

The same type of study was performed to determine the number of existing aural broadcast reception services within the KIQS-FM proposed gain area. Exhibit E-4 shows the KIQS-FM Class B1 60 dBμ contour at Dunnigan and the service contours of the other aural service providers. The list of stations is tabulated in exhibit E-10.

Exhibits E-6A through E-6K are maps showing the areas within the KIQS-FM contour at Dunnigan that already receive from five to fifteen-plus aural reception services. Again, each level of service is shaded and corresponds to the number shown in the title block.

The proposed Class B1 facility at Dunnigan will result in a sixth service to 55 persons, a seventh service to 477 persons, an eighth service to 124 persons and a ninth service to 104 persons. These data are tabulated in Exhibit E-8.

Exhibit E-11 is a map depicting the KIQS-FM Willows and Dunnigan contours and the locations of the 1990 U.S. Census blocks in the area. The map shows that most of the area within the proposed gain area is rural and will benefit from establishment of a new service.

IV. CONCLUSIONS

In conclusion, the following salient facts result from the outcome of the aforementioned analysis, and information provided by the petitioner in its original filing.

- The proposed gain and loss areas are already well served under the Commission's definition of at least five radio services.

- The proposed loss area will be left with no fewer than nine aural reception services and 76 percent of the loss area will still receive eleven stations.

- Two additional Class A channels are available for allotment within the proposed loss area that meet the minimum spacing criteria should an expression of interest be received.

- Establishment of a Class B1 facility at Dunnigan will provide the community with its first local aural broadcast service.

- No other FM channel of any class is available for allotment at Dunnigan as an alternative to Channel 288B1.

- Allotment of Channel 288B1 at Dunnigan will result in a sixth service to 55 persons, a seventh service to 477 persons, an eighth service to 124 persons and a ninth service to 104 persons.

The petitioner reaffirms its intention to apply for Channel 288B1 at Dunnigan if it is allotted and, if authorized, to build the requested facilities promptly.

It is believed that all methods employed in making the determinations contained within this Engineering Statement were in accordance with applicable F.C.C. Rules and Regulations and good engineering practice.

Lawrence L. Morton, P.E.
Consulting Engineer to the Petitioner
May 27, 1994

AFFIDAVIT

State of California)
) **ss:**
County of Orange)

Lawrence L. Morton, being first duly sworn upon oath, deposes and says:

- That he is a qualified engineer,
- That he is a Registered Professional Engineer in the State of California,
- That he is a member of the Association of Federal Communications Consulting Engineers,
- That his qualifications are a matter of record with the Federal Communications Commission,
- That he has prepared many broadcast applications and engineering exhibits that have been filed with and granted by the Federal Communications Commission,
- That he has carried out such engineering work and that the results thereof are attached hereto and form part of this affidavit, and
- That the foregoing statement and the report regarding the aforementioned engineering work are true and correct of his own knowledge.

Date: May 27, 1994

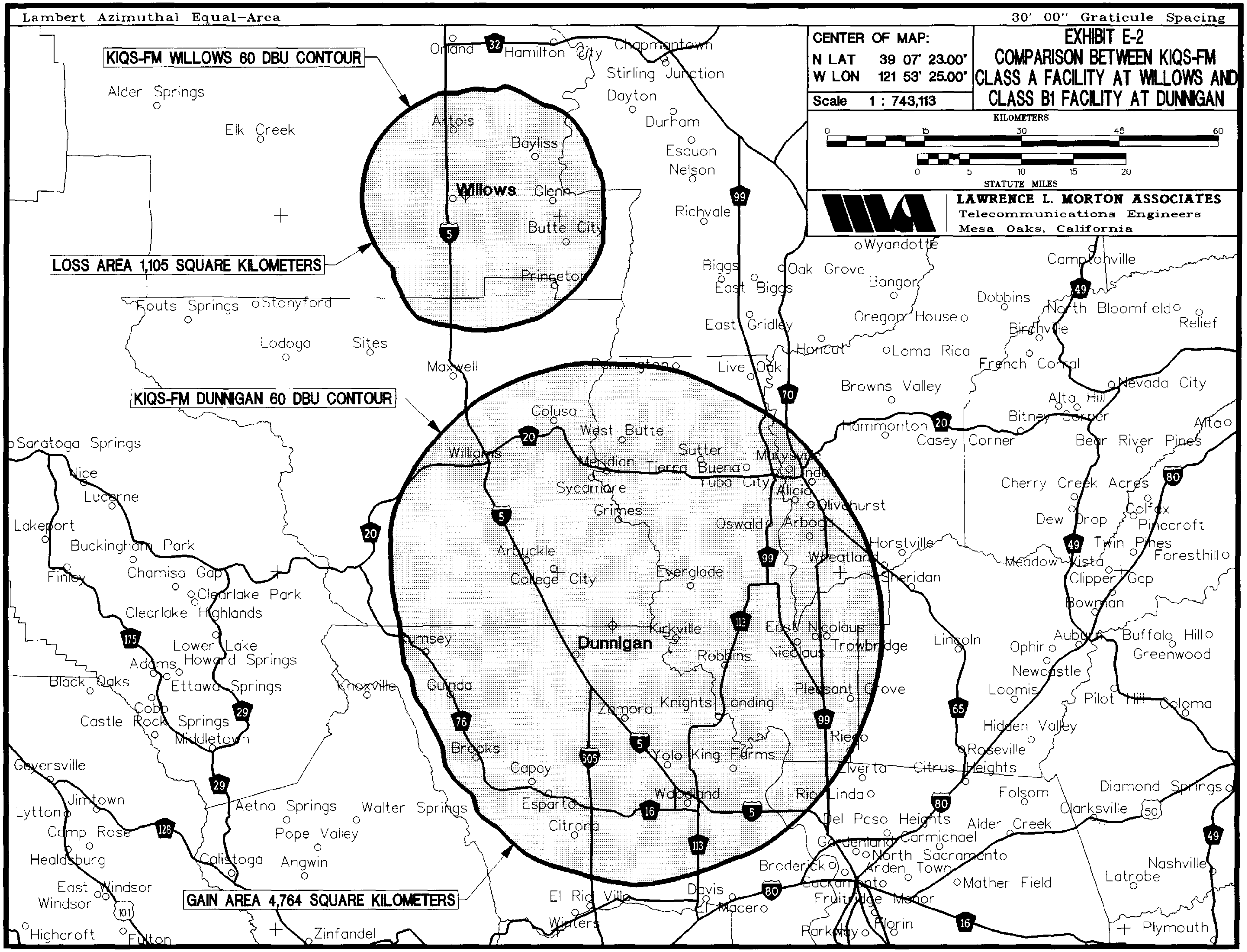
Lawrence L. Morton, P.E.

On May 27, 1994, before me, Nancy A. Chase, a Notary Public, in and for the State of California, personally appeared Lawrence L. Morton known to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same.

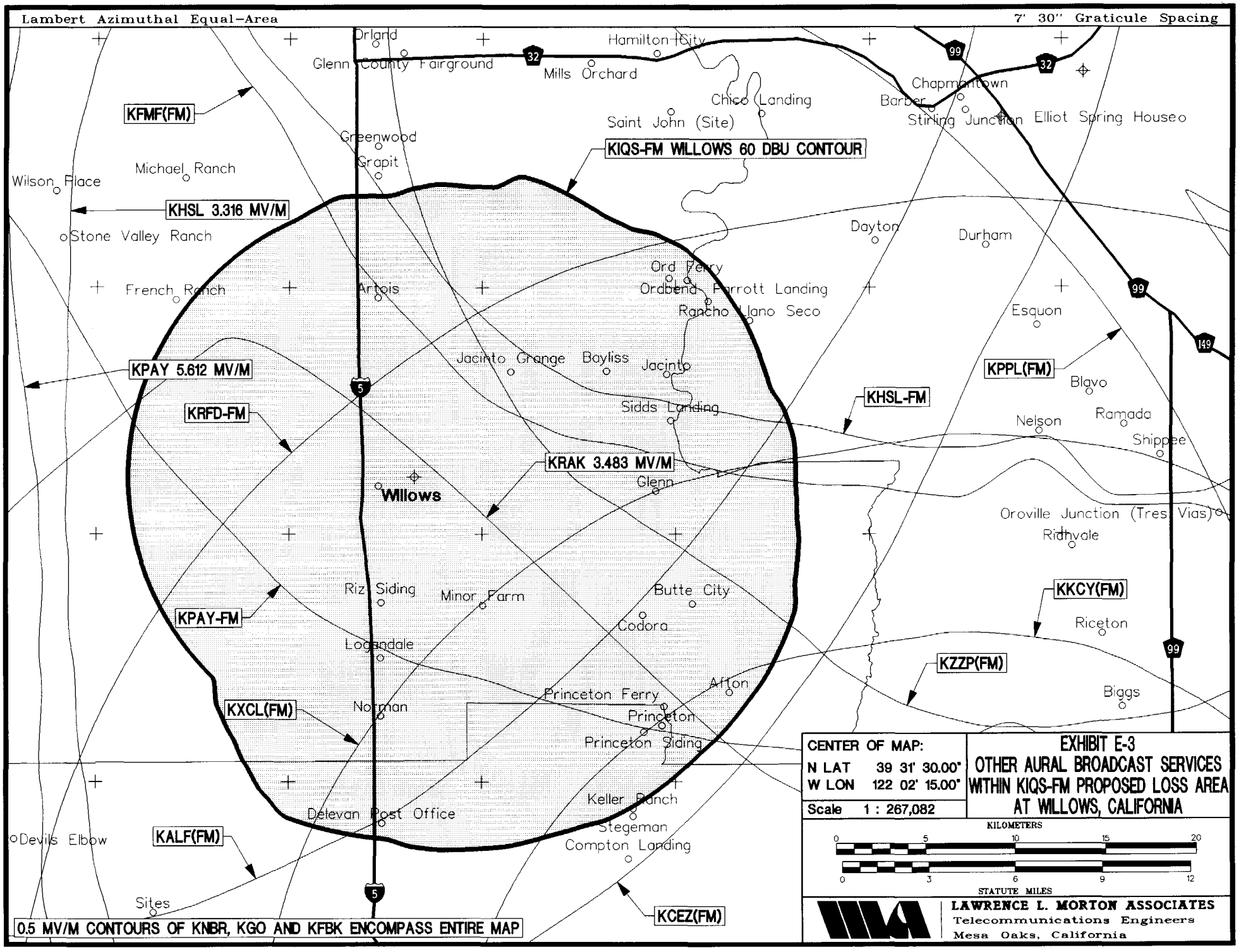
My Commission expires 11/30/94

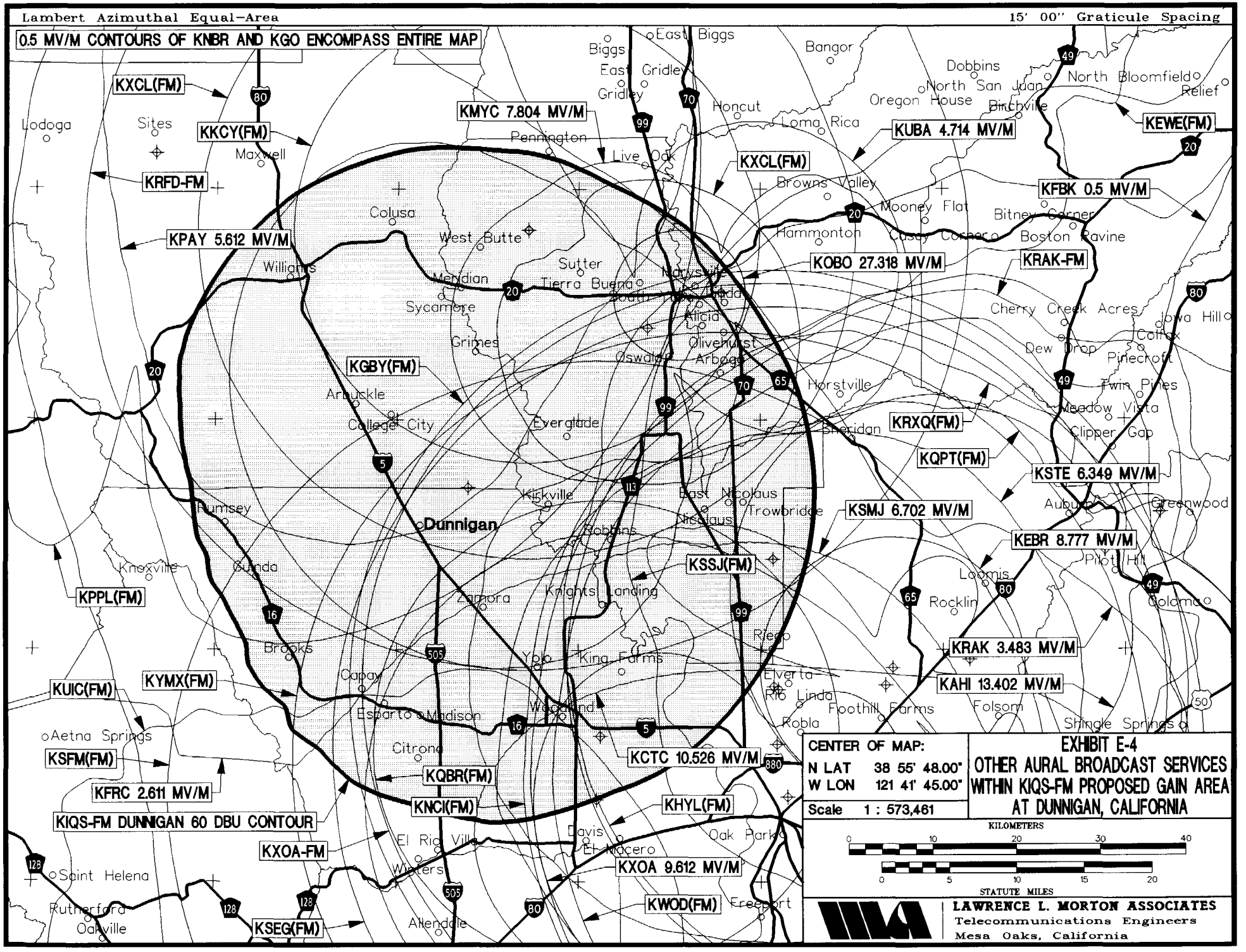
Nancy A. Chase
Notary Public

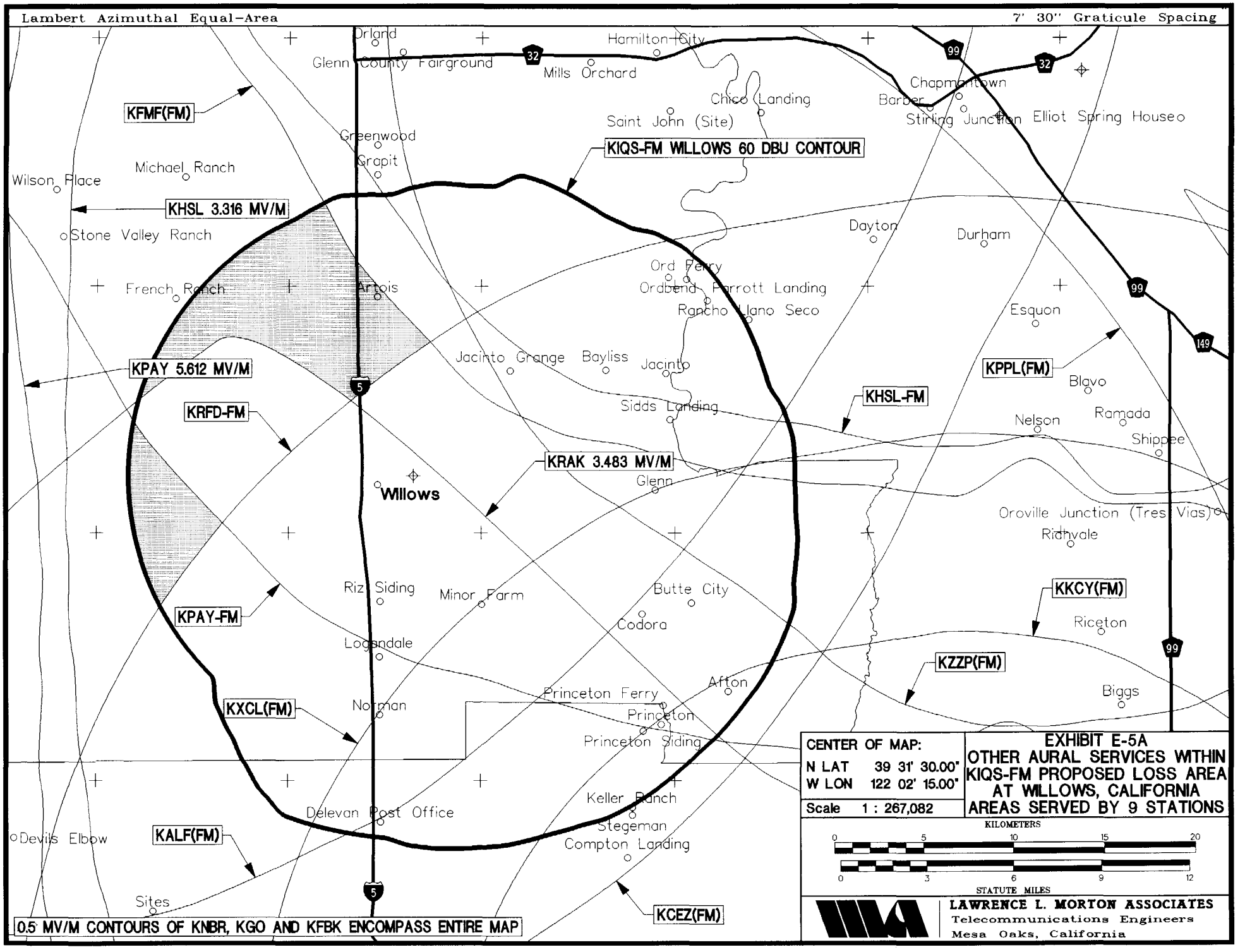
OFFICIAL SEAL
NANCY A. CHASE
Notary Public California
ORANGE COUNTY
My Comm. Expires Nov. 30, 199



Lambert Azimuthal Equal-Area
30' 00" Graticule Spacing
CENTER OF MAP:
N LAT 39 07' 23.00"
W LON 121 53' 25.00"
Scale 1 : 743,113
EXHIBIT E-2
COMPARISON BETWEEN KIQS-FM
CLASS A FACILITY AT WILLOWS AND
CLASS B1 FACILITY AT DUNNIGAN
KILOMETERS
0 15 30 45 60
0 5 10 15 20
STATUTE MILES
LAWRENCE L. MORTON ASSOCIATES
Telecommunications Engineers
Mesa Oaks, California
KIQS-FM WILLOWS 60 DBU CONTOUR
LOSS AREA 1,105 SQUARE KILOMETERS
KIQS-FM DUNNIGAN 60 DBU CONTOUR
GAIN AREA 4,764 SQUARE KILOMETERS
Willows
Dunnigan
Orland
Hamilton City
Chapmantown
Stirling Junction
Dayton
Durham
Esquon
Nelson
Richvale
Alder Springs
Elk Creek
Artois
Bayliss
Glenn
Butte City
Princeton
Fouts Springs
Stonyford
Lodoga
Sites
Maxwell
Wyandotte
Biggs
East Biggs
Oak Grove
Bangor
Campton ville
Dobbins
North Bloomfield
Relief
Oregon House
East Gridley
Birchville
Honcut
Loma Rica
French Corral
Live Oak
Browns Valley
Nevada City
Alta Hill
Colusa
West Butte
Williams
Sutter
Meridian
Tierra Buena
Marysville
Yuba City
Sycamore
Grimes
Alicia
Olivehurst
Oswald
Arboga
Arbuckle
College City
Everglade
Wheatland
Horstville
Sheridan
Hammonton
Casey Corner
Bitney Corner
Bear River Pines
Alta
Cherry Creek Acres
Colfax
Dew Drop
Pinecroft
Twin Pines
Foresthill
Meadow Vista
Clipper Gap
Bowman
Saratoga Springs
Nice
Lucerne
Lakeport
Buckingham Park
Chamisa Gap
Finley
Clearlake Park
Clearlake Highlands
Lower Lake
Howard Springs
Adams
Black Oaks
Ettawa Springs
Cobb
Castle Rock Springs
Middletown
Knoxville
Rumsey
Guinda
Kirkville
Robbins
East Nicolaus
Nicolaus
Trowbridge
Lincoln
Ophir
Auburn
Buffalo Hill
Greenwood
Newcastle
Loomis
Pilot Hill
Coloma
Zamora
Knights Landing
Pleasant Grove
Rio Oso
Hidden Valley
Roseville
Citrus Heights
Brooks
Capay
Yolo
King Farms
Elverta
Folsom
Diamond Springs
Geyersville
Jimtown
Lytton
Aetna Springs
Walter Springs
Esparto
Woodland
Rio Linda
Clarksville
Camp Rose
Pope Valley
Citrona
Del Paso Heights
Carmichael
Alder Creek
Healdsburg
Calistoga
Angwin
Gardenland
North Sacramento
Arden Town
Broderick
Nashville
Latrobe
Mather Field
East Windsor
Windsor
El Rio Villa
Davis
Sacramento
Fruitridge Manor
Highcroft
Fulton
Zinfandel
Winters
El Macero
Parkway
Florin
Plymouth
32
99
5
20
70
80
49
113
175
29
76
505
65
16
128
50
101


Lambert Azimuthal Equal-Area
7' 30" Graticule Spacing
KFMF(FM)
KIQS-FM WILLOWS 60 DBU CONTOUR
KHSL 3.316 MV/M
KPAY 5.612 MV/M
KRFD-FM
KRAK 3.483 MV/M
KHSL-FM
KPPL(FM)
KPAY-FM
KXCL(FM)
KKCY(FM)
KZZP(FM)
KALF(FM)
KCEZ(FM)
Willows
Orland
Glenn County Fairground
Hamilton City
Mills Orchard
Chico Landing
Saint John (Site)
Chapmantown
Barber
Stirling Junction
Elliot Spring House
Greenwood
Grapit
Michael Ranch
Wilson Place
Stone Valley Ranch
French Ranch
Artois
Dayton
Durham
Ord Ferry
Ordbend
Parrott Landing
Rancho Llano Seco
Esquon
Jacinto Grange
Bayliss
Jacinto
Sidds Landing
Blavo
Nelson
Ramada
Shippee
Glenn
Oroville Junction (Tres Vias)
Ridhvale
Riz Siding
Minor Farm
Butte City
Codora
Riceton
Logandale
Afton
Princeton Ferry
Norman
Princeton
Princeton Siding
Biggs
Keller Ranch
Delevan Post Office
Stegeman
Compton Landing
Devils Elbow
Sites
0.5 MV/M CONTOURS OF KNBR, KGO AND KFBK ENCOMPASS ENTIRE MAP
CENTER OF MAP:
N LAT 39 31' 30.00"
W LON 122 02' 15.00"
Scale 1 : 267,082
EXHIBIT E-3
OTHER AURAL BROADCAST SERVICES
WITHIN KIQS-FM PROPOSED LOSS AREA
AT WILLOWS, CALIFORNIA
KILOMETERS
0 5 10 15 20
0 3 6 9 12
STATUTE MILES
LAWRENCE L. MORTON ASSOCIATES
Telecommunications Engineers
Mesa Oaks, California


Lambert Azimuthal Equal-Area
15' 00" Graticule Spacing
0.5 MV/M CONTOURS OF KNBR AND KGO ENCOMPASS ENTIRE MAP
KXCL(FM)
KKCY(FM)
KRFD-FM
KPAY 5.612 MV/M
KGBY(FM)
KPPL(FM)
KUIC(FM)
KYMX(FM)
KSFM(FM)
KFRC 2.611 MV/M
KIQS-FM DUNNIGAN 60 DBU CONTOUR
KXOA-FM
KSEG(FM)
KMYC 7.804 MV/M
KXCL(FM)
KQBR(FM)
KNCI(FM)
KCTC 10.526 MV/M
KSSJ(FM)
KSMJ 6.702 MV/M
KOBO 27.318 MV/M
KUBA 4.714 MV/M
KFBK 0.5 MV/M
KRAK-FM
KRXQ(FM)
KQPT(FM)
KSTE 6.349 MV/M
KEBR 8.777 MV/M
KRAK 3.483 MV/M
KAHI 13.402 MV/M
KEWE(FM)
KHYL(FM)
KXOA 9.612 MV/M
KWOD(FM)
Dunnigan
Biggs
East Biggs
Gridley
East Gridley
Bangor
Dobbins
North San Juan
North Bloomfield
Relief
Oregon House
Pinchville
Honcut
Loma Rica
Pennington
Live Oak
Browns Valley
Mooney Flat
Bitney Corner
Hammonton
Casey Corners
Boston Ravine
Lodoga
Sites
Maxwell
Colusa
West Butte
Williams
Sutter
Tierra Buena
Meridian
Sycamore
Alicia
Grimes
Olivehurst
Arbago
Oswald
Arbuckle
College City
Everglade
Horstville
Sheridan
Cherry Creek Acres
Iowa Hill
Colfax
Dew Drop
Pinecroft
Twin Pines
Meadow Vista
Clipper Gap
Auburn
Greenwood
Kirkville
East Nicolaus
Nicolaus
Trowbridge
Robbins
Rumsey
Knoxville
Guinda
Zamora
Knights Landing
Brooks
Capay
Yolo
King Farms
Esparto
Madison
Woodland
Citrona
Aetna Springs
Saint Helena
Rutherford
Oakville
El Rio Villa
Winters
Davis
El Macero
Oak Park
Attendale
Freeport
Riego
Elverta
Rio Linda
Robla
Foothill Farms
Folsom
Shingle Springs
Loomis
Rocklin
Pilot Hill
Coloma
CENTER OF MAP:
N LAT 38 55' 48.00"
W LON 121 41' 45.00"
Scale 1 : 573,461
EXHIBIT E-4
OTHER AURAL BROADCAST SERVICES
WITHIN KIQS-FM PROPOSED GAIN AREA
AT DUNNIGAN, CALIFORNIA
KILOMETERS
0 10 20 30 40
0 5 10 15 20
STATUTE MILES
LAWRENCE L. MORTON ASSOCIATES
Telecommunications Engineers
Mesa Oaks, California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Jacinto
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Ramada
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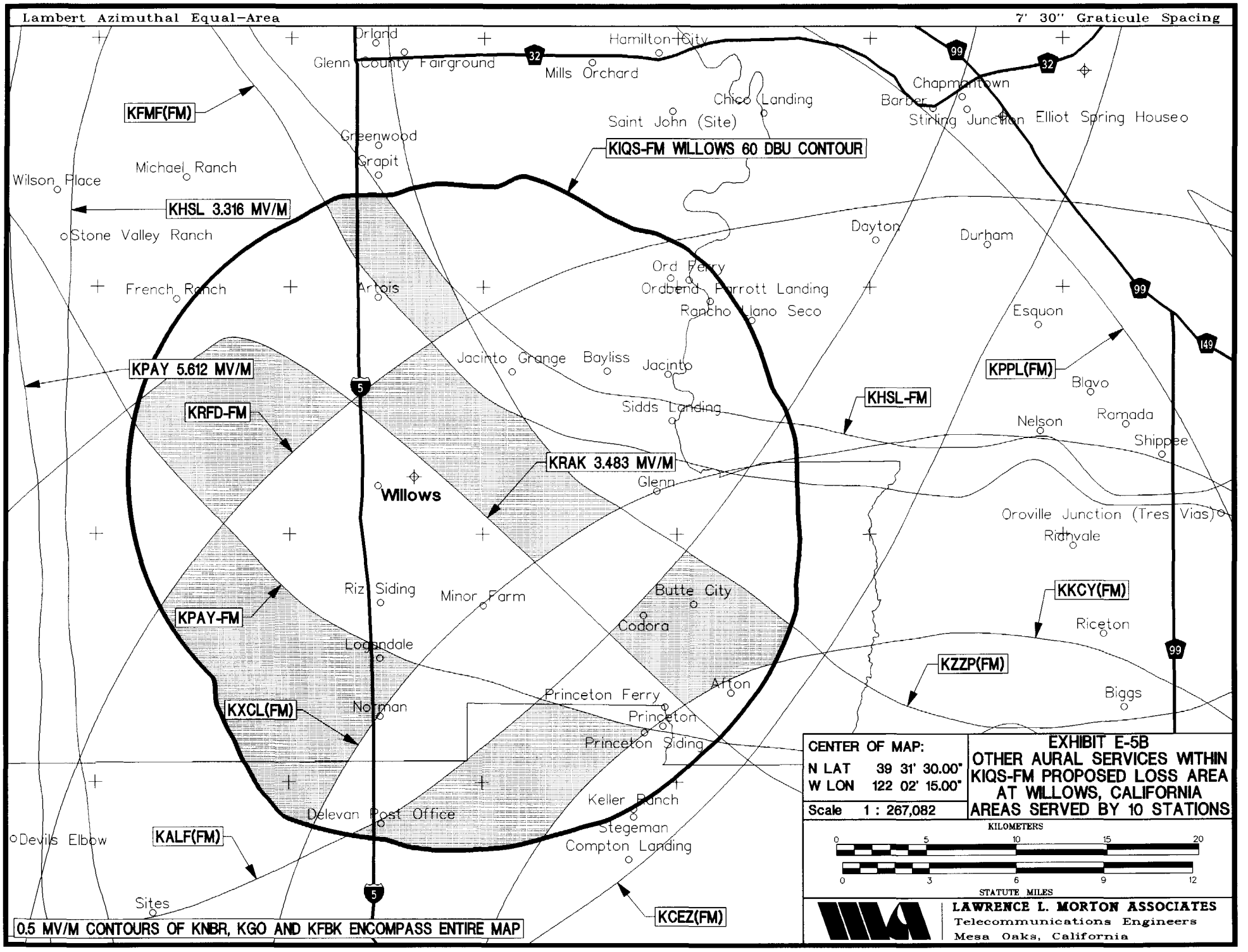
CENTER OF MAP:
N LAT 39 31' 30.00"
W LON 122 02' 15.00"
Scale 1 : 267,082
EXHIBIT E-5A
OTHER AURAL SERVICES WITHIN
KIQS-FM PROPOSED LOSS AREA
AT WILLOWS, CALIFORNIA
AREAS SERVED BY 9 STATIONS
KILOMETERS
0 5 10 15 20
STATUTE MILES
0 3 6 9 12
LAWRENCE L. MORTON ASSOCIATES
Telecommunications Engineers
Mesa Oaks, California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Princeton Siding
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CENTER OF MAP:
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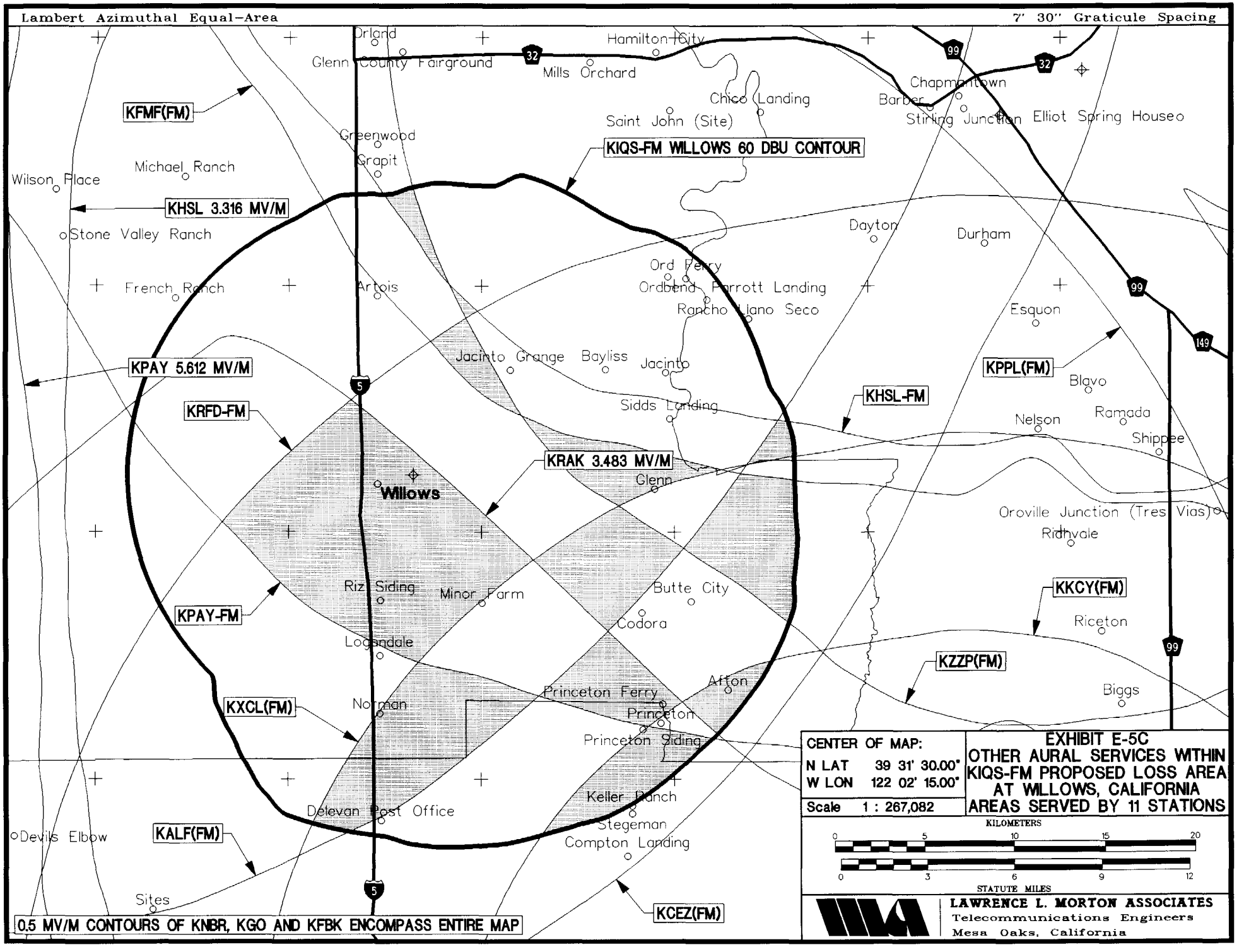
Scale 1 : 267,082
EXHIBIT E-5B
OTHER AURAL SERVICES WITHIN KIQS-FM PROPOSED LOSS AREA AT WILLOWS, CALIFORNIA
AREAS SERVED BY 10 STATIONS
KILOMETERS
0 5 10 15 20
0 3 6 9 12
STATUTE MILES
LAWRENCE L. MORTON ASSOCIATES
Telecommunications Engineers
Mesa Oaks, California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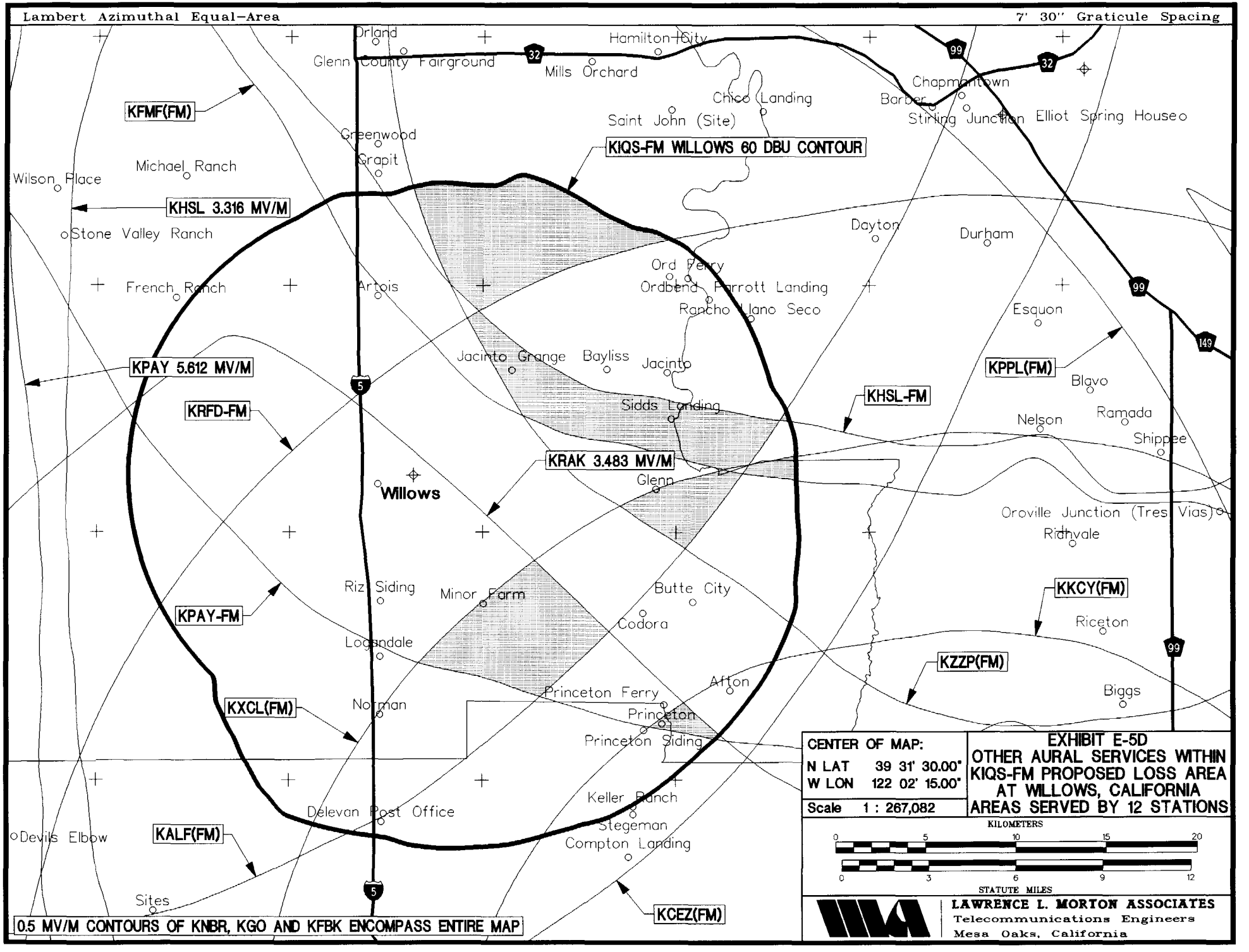
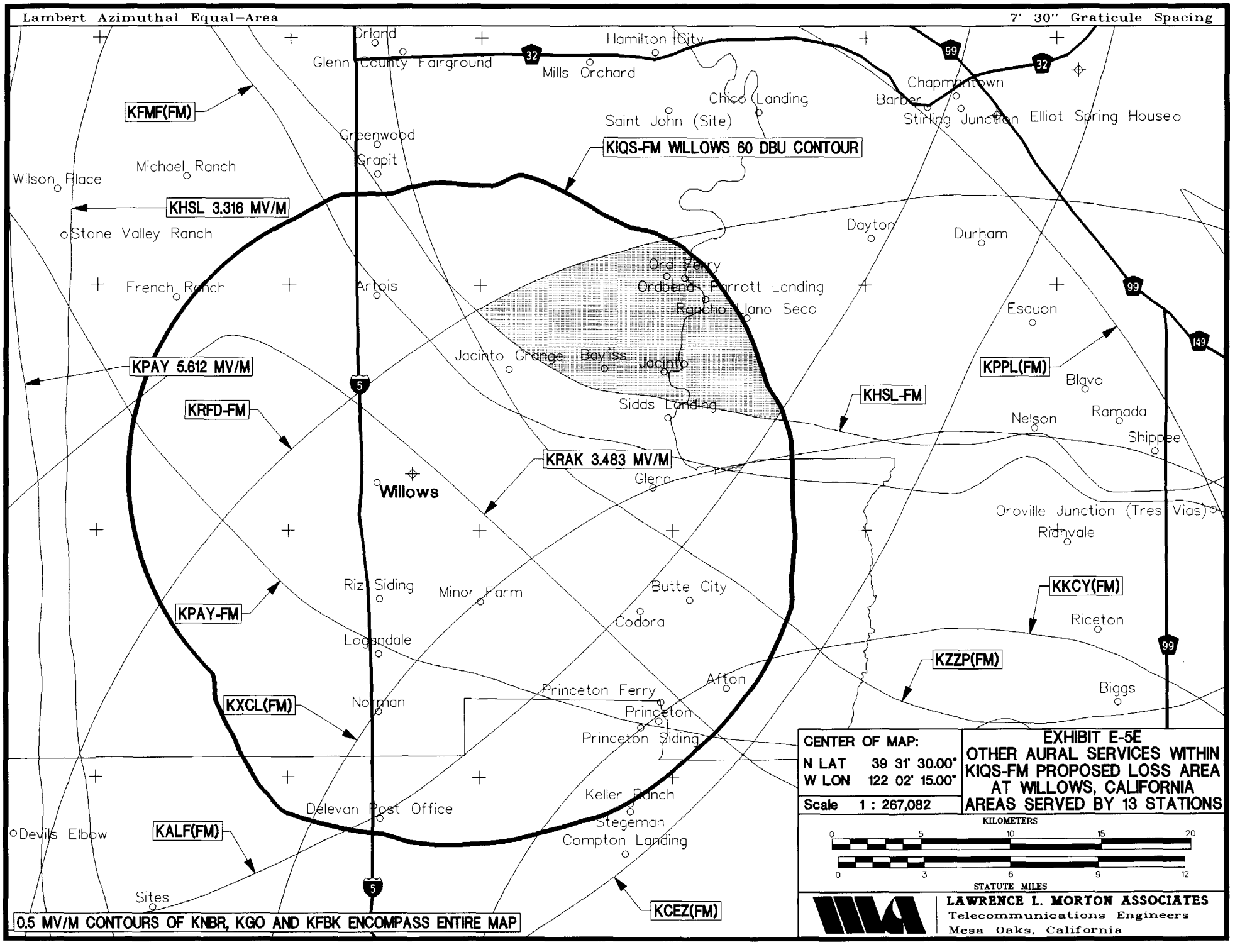
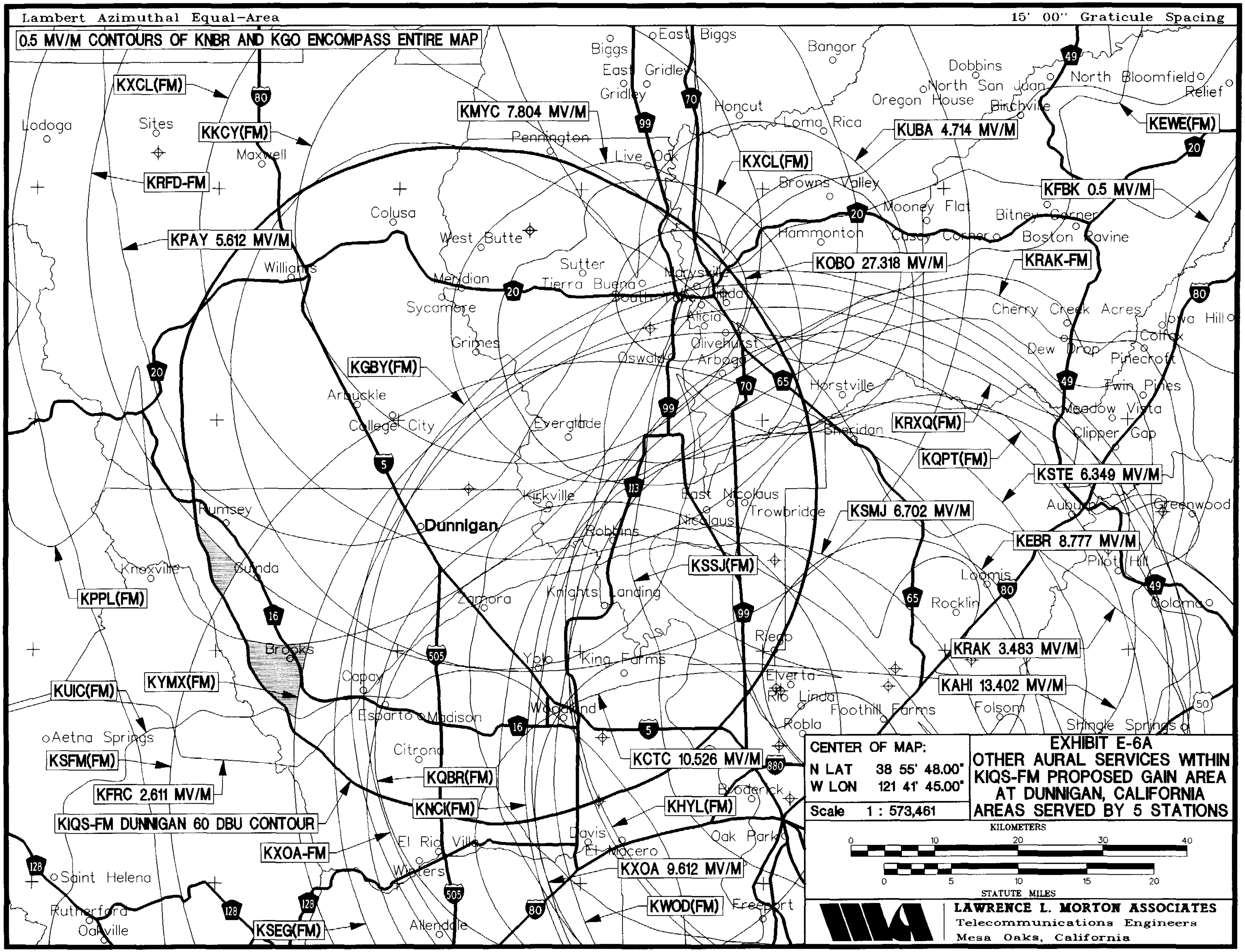
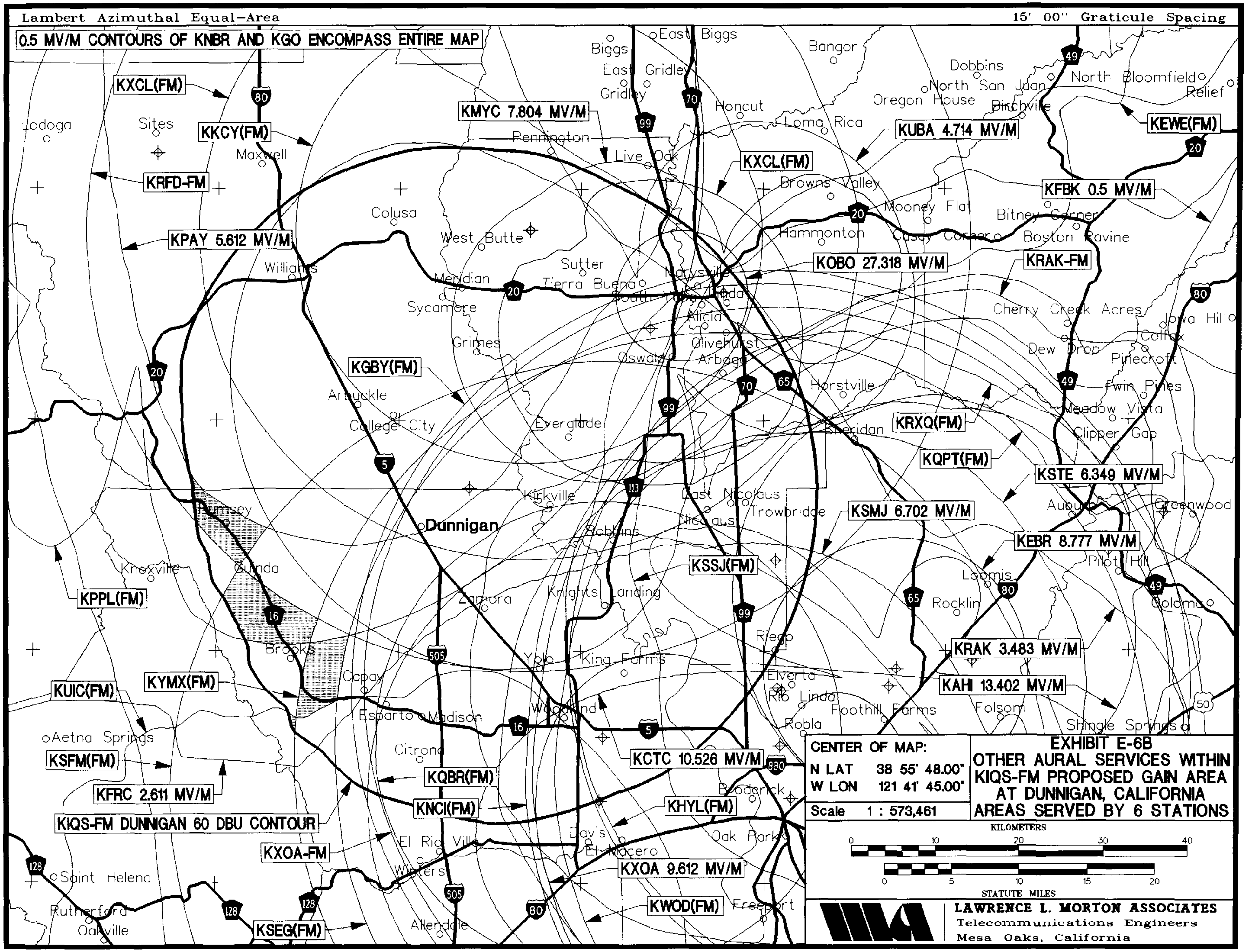
KHSL 3.316 MV/M
KIQS-FM WILLOWS 60 DBU CONTOUR
KPAY 5.612 MV/M
KRFD-FM
KRAK 3.483 MV/M
KHSL-FM
KPPL(FM)
KPAY-FM
KXCL(FM)
KKCY(FM)
KZZP(FM)
KALF(FM)
KCEZ(FM)
Willows
Orland
Glenn County Fairground
Hamilton City
Mills Orchard
Chico Landing
Saint John (Site)
Chapmantown
Barber
Stirling Junction
Elliot Spring Houseo
Greenwood
Grapit
Michael Ranch
Wilson Place
Stone Valley Ranch
French Ranch
Artois
Dayton
Durham
Ord Perry
Ordbend
Parrott Landing
Rancho Llano Seco
Esquon
Jacinto Grange
Bayliss
Jacinto
Sidds Landing
Blavo
Nelson
Ramada
Shippee
Glenn
Oroville Junction (Tres Vias)
Ridhvale
Riz Siding
Minor Farm
Butte City
Codora
Riceton
Logandale
Afton
Princeton Ferry
Norman
Princeton
Biggs
Princeton Siding
Keller Ranch
Delevan Post Office
Stegeman
Devils Elbow
Compton Landing
Sites
0.5 MV/M CONTOURS OF KNBR, KGO AND KFBK ENCOMPASS ENTIRE MAP
CENTER OF MAP:
N LAT 39 31' 30.00"
W LON 122 02' 15.00"
Scale 1 : 267,082
EXHIBIT E-5C
OTHER AURAL SERVICES WITHIN KIQS-FM PROPOSED LOSS AREA AT WILLOWS, CALIFORNIA
AREAS SERVED BY 11 STATIONS
KILOMETERS
0 5 10 15 20
0 3 6 9 12
STATUTE MILES
LAWRENCE L. MORTON ASSOCIATES
Telecommunications Engineers
Mesa Oaks, California

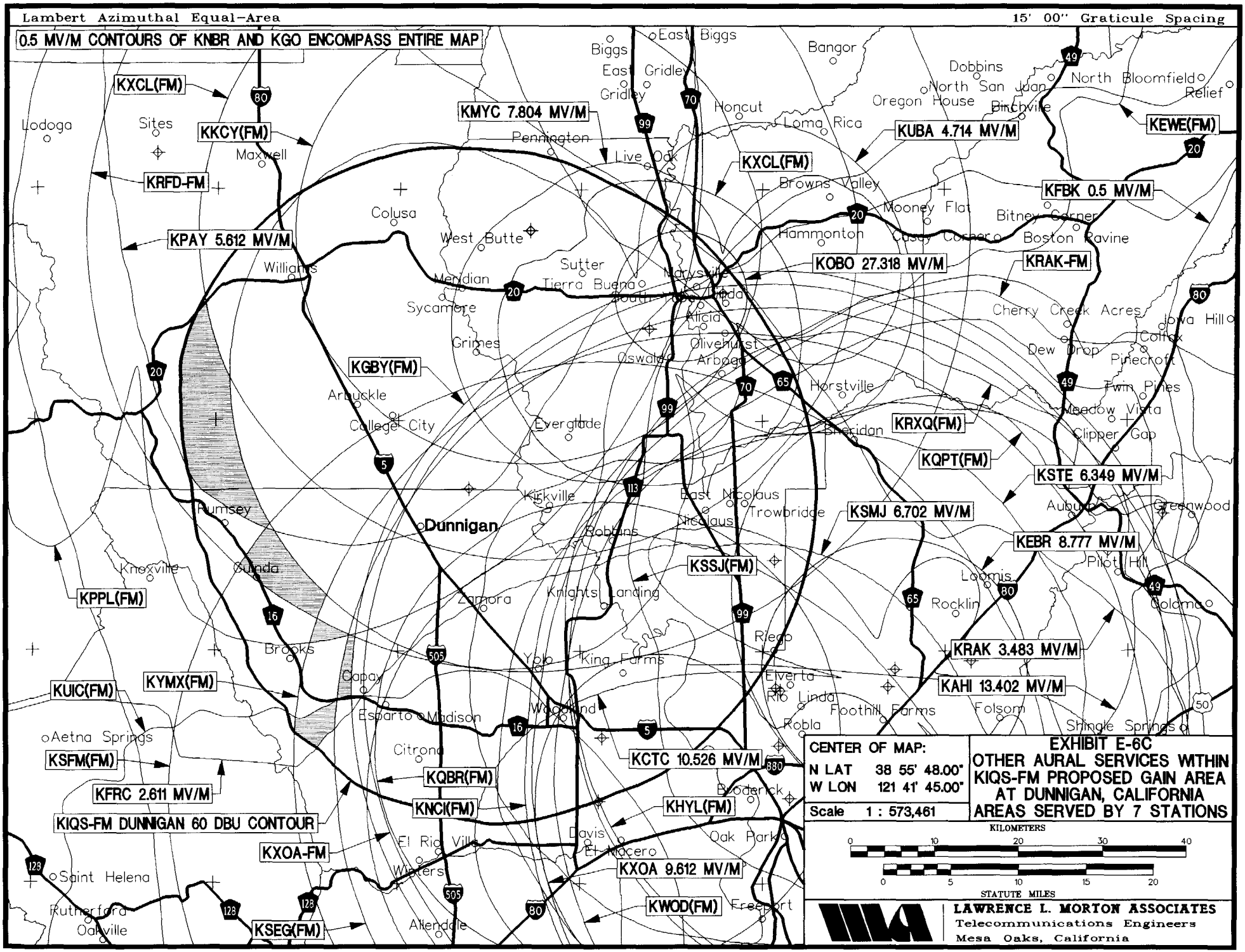

Lambert Azimuthal Equal-Area
7' 30" Graticule Spacing
KFMF(FM)
KIQS-FM WILLOWS 60 DBU CONTOUR
KHSL 3.316 MV/M
KPAY 5.612 MV/M
KRFD-FM
KRAK 3.483 MV/M
KHSL-FM
KPPL(FM)
KPAY-FM
KXCL(FM)
KKCY(FM)
KZZP(FM)
KALF(FM)
KCEZ(FM)
Willows
Orland
Glenn County Fairground
Hamilton City
Mills Orchard
Chico Landing
Saint John (Site)
Chapmantown
Barber
Stirling Junction
Elliot Spring House
Greenwood
Grapit
Michael Ranch
Wilson Place
Stone Valley Ranch
French Ranch
Artois
Dayton
Durham
Ord Ferry
Ordbend
Parrott Landing
Rancho Llano Seco
Esquon
Jacinto Grange
Bayliss
Jacinto
Sidds Landing
Blavo
Nelson
Ramada
Shippee
Glenn
Oroville Junction (Tres Vias)
Ridgvale
Riz Siding
Minor Farm
Butte City
Codora
Riceton
Logandale
Afton
Princeton Ferry
Norman
Princeton
Biggs
Princeton Siding
Keller Ranch
Delevan Post Office
Stegeman
Devils Elbow
Compton Landing
Sites
0.5 MV/M CONTOURS OF KNBR, KGO AND KFBK ENCOMPASS ENTIRE MAP
CENTER OF MAP:
N LAT 39 31' 30.00"
W LON 122 02' 15.00"
Scale 1 : 267,082
EXHIBIT E-5D
OTHER AURAL SERVICES WITHIN KIQS-FM PROPOSED LOSS AREA AT WILLOWS, CALIFORNIA
AREAS SERVED BY 12 STATIONS
KILOMETERS
0 5 10 15 20
0 3 6 9 12
STATUTE MILES
LAWRENCE L. MORTON ASSOCIATES
Telecommunications Engineers
Mesa Oaks, California

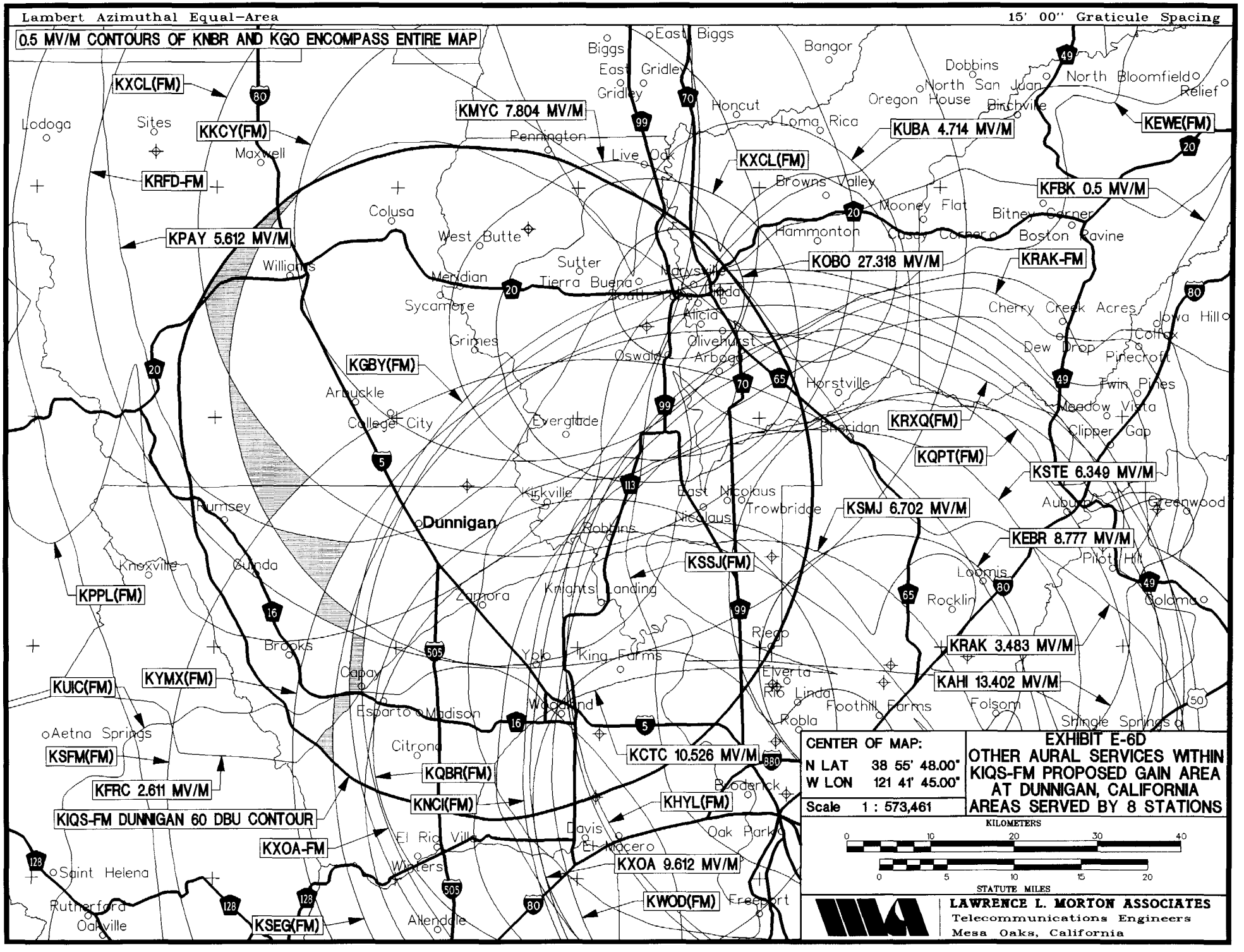

Lambert Azimuthal Equal-Area
7' 30" Graticule Spacing
Orland
Glenn County Fairground
Hamilton City
Mills Orchard
Chico Landing
Saint John (Site)
Chapmantown
Barber
Stirling Junction
Elliot Spring House
Greenwood
Grapit
Michael Ranch
Wilson Place
Stone Valley Ranch
French Ranch
Artois
Ord Ferry
Ordbend
Parrott Landing
Rancho Llano Seco
Dayton
Durham
Esquon
Jacinto Grange
Bayliss
Jacinto
Sidds Landing
Blayo
Nelson
Ramada
Shippee
Willows
Glenn
Oroville Junction (Tres Vias)
Ridhvale
Riz Siding
Minor Farm
Butte City
Codora
Riceton
Logandale
Afton
Princeton Ferry
Norman
Princeton
Princeton Siding
Biggs
Keller Ranch
Delevan Post Office
Stegeman
Compton Landing
Devils Elbow
Sites
KFMF(FM)
KIQS-FM WILLOWS 60 DBU CONTOUR
KHSL 3.316 MV/M
KPAY 5.612 MV/M
KRFD-FM
KRAK 3.483 MV/M
KHSL-FM
KPPL(FM)
KPAY-FM
KKCY(FM)
KXCL(FM)
KZZP(FM)
KALF(FM)
KCEZ(FM)
0.5 MV/M CONTOURS OF KNBR, KGO AND KFBK ENCOMPASS ENTIRE MAP
CENTER OF MAP:
N LAT 39 31' 30.00"
W LON 122 02' 15.00"
Scale 1 : 267,082
EXHIBIT E-5E
OTHER AURAL SERVICES WITHIN KIQS-FM PROPOSED LOSS AREA AT WILLOWS, CALIFORNIA
AREAS SERVED BY 13 STATIONS
KILOMETERS
0 5 10 15 20
0 3 6 9 12
STATUTE MILES
LAWRENCE L. MORTON ASSOCIATES
Telecommunications Engineers
Mesa Oaks, California

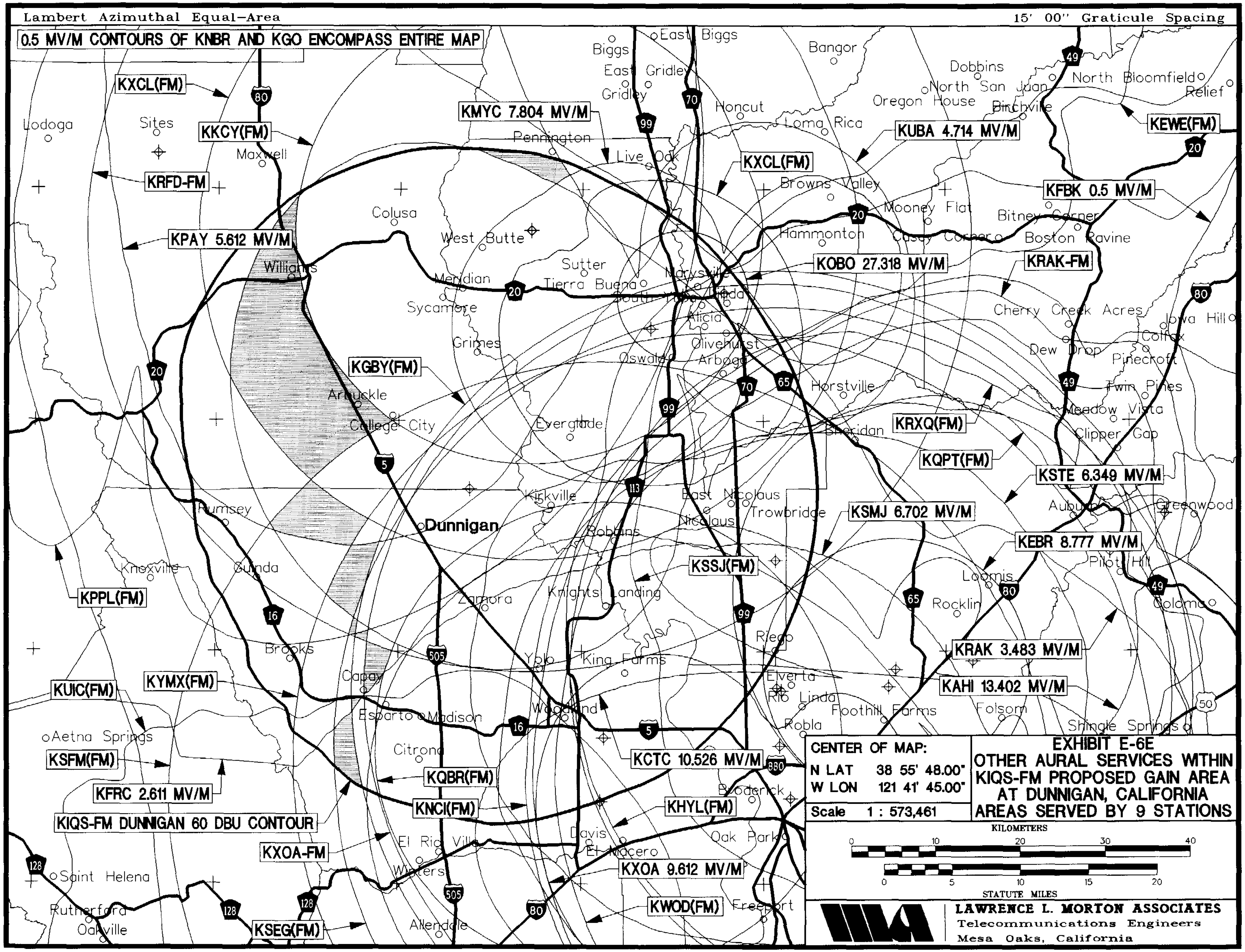

Lambert Azimuthal Equal-Area
15' 00" Graticule Spacing
0.5 MV/M CONTOURS OF KNBR AND KGO ENCOMPASS ENTIRE MAP
KXCL(FM)
KKCY(FM)
KMYC 7.804 MV/M
KUBA 4.714 MV/M
KEWE(FM)
KRFD-FM
KXCL(FM)
KFBK 0.5 MV/M
KPAY 5.612 MV/M
KOBO 27.318 MV/M
KRAK-FM
KGBY(FM)
KRXQ(FM)
KQPT(FM)
KSTE 6.349 MV/M
KSMJ 6.702 MV/M
KEBR 8.777 MV/M
KSSJ(FM)
KPPL(FM)
KRAK 3.483 MV/M
KAHI 13.402 MV/M
KUIC(FM)
KYMX(FM)
KSFM(FM)
KCTC 10.526 MV/M
KQBR(FM)
KFRC 2.611 MV/M
KNCI(FM)
KHYL(FM)
KIQS-FM DUNNIGAN 60 DBU CONTOUR
KXOA-FM
KXOA 9.612 MV/M
KWOD(FM)
KSEG(FM)
Dunnigan
Biggs
East Biggs
East Gridley
Gridley
Bangor
Dobbins
North San Juan
North Bloomfield
Relief
Oregon House
Birchville
Honcut
Loma Rica
Lodoga
Sites
Maxwell
Pennington
Live Oak
Browns Valley
Mooney Flat
Colusa
Bitney Corner
West Butte
Hammonton
Casey Corner
Boston Ravine
Williams
Sutter
Marysville
Meridian
Tierra Buena
South Yuba
Linda
Sycamore
Cherry Creek Acres
Iowa Hill
Alicia
Grimes
Olivehurst
Colfax
Dew Drop
Oswald
Arboga
Pinecroft
Horstville
Twin Pines
Arbuckle
Meadow Vista
College City
Evergla de
Sheridan
Clipper Gap
Kirkville
East Nicolaus
Auburn
Greenwood
Rumsey
Nicolaus
Trowbridge
Robbins
Knoxville
Guinda
Loomis
Pilot Hill
Zamora
Knights Landing
Rocklin
Coloma
Brooks
Riego
Yolo
King Farms
Capay
Elverta
Rio Linda
Esparto
Madison
Woodland
Foothill Farms
Folsom
Aetna Springs
Robla
Shingle Springs
Citrona
Broderick
El Rio Villa
Davis
El Macero
Oak Park
Saint Helena
Winters
Rutherford
Oakville
Allendale
Freeport
CENTER OF MAP:
N LAT 38 55' 48.00"
W LON 121 41' 45.00"
Scale 1 : 573,461
EXHIBIT E-6A
OTHER AURAL SERVICES WITHIN
KIQS-FM PROPOSED GAIN AREA
AT DUNNIGAN, CALIFORNIA
AREAS SERVED BY 5 STATIONS
KILOMETERS
0
10
20
30
40
0
5
10
15
20
STATUTE MILES
LAWRENCE L. MORTON ASSOCIATES
Telecommunications Engineers
Mesa Oaks, California

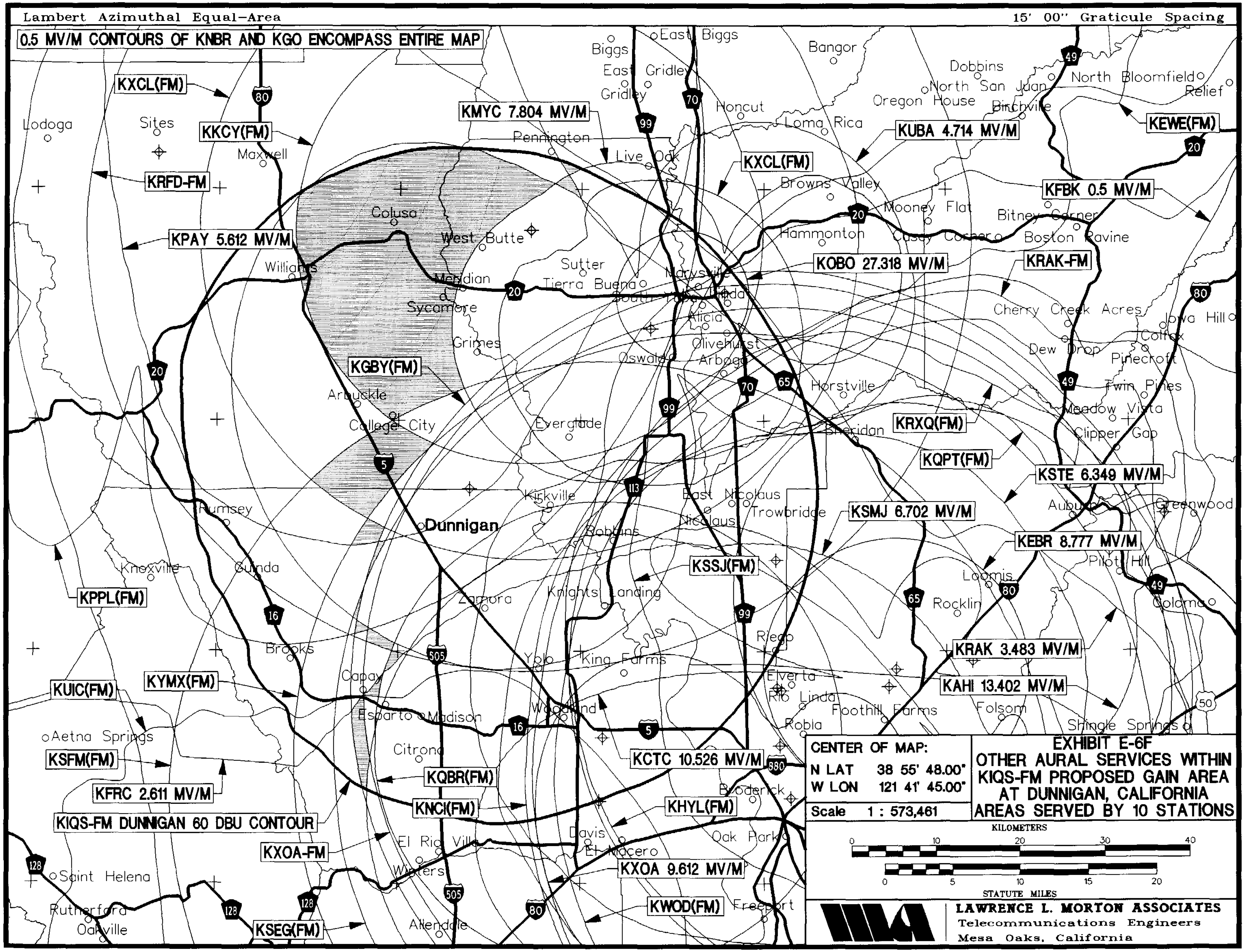


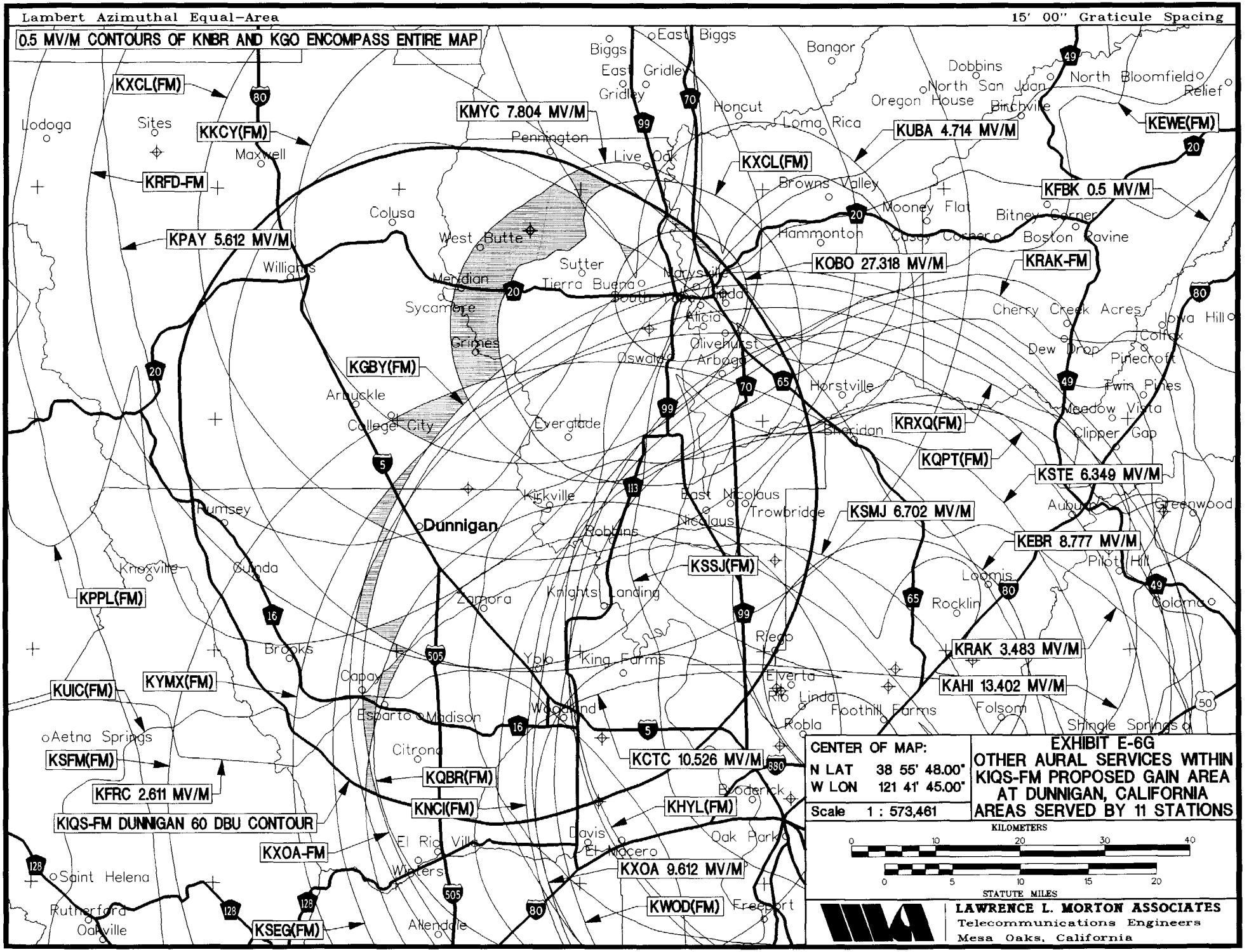
Lambert Azimuthal Equal-Area
15' 00" Graticule Spacing
0.5 MV/M CONTOURS OF KNBR AND KGO ENCOMPASS ENTIRE MAP
KXCL(FM)
KKCY(FM)
KRFD-FM
KPAY 5.612 MV/M
KMYC 7.804 MV/M
KUBA 4.714 MV/M
KEWE(FM)
KXCL(FM)
KFBK 0.5 MV/M
KOBO 27.318 MV/M
KRAK-FM
KGBY(FM)
KRXQ(FM)
KQPT(FM)
KSTE 6.349 MV/M
KSMJ 6.702 MV/M
KEBR 8.777 MV/M
KSSJ(FM)
KPPL(FM)
KRAK 3.483 MV/M
KAHI 13.402 MV/M
KUIC(FM)
KYMX(FM)
KSFM(FM)
KFRC 2.611 MV/M
KIQS-FM DUNNIGAN 60 DBU CONTOUR
KQBR(FM)
KNCI(FM)
KCTC 10.526 MV/M
KHYL(FM)
KXOA-FM
KXOA 9.612 MV/M
KWOD(FM)
KSEG(FM)
Dunnigan
CENTER OF MAP:
N LAT 38 55' 48.00"
W LON 121 41' 45.00"
Scale 1 : 573,461
EXHIBIT E-6B
OTHER AURAL SERVICES WITHIN
KIQS-FM PROPOSED GAIN AREA
AT DUNNIGAN, CALIFORNIA
AREAS SERVED BY 6 STATIONS
KILOMETERS
0 10 20 30 40
0 5 10 15 20
STATUTE MILES
LAWRENCE L. MORTON ASSOCIATES
Telecommunications Engineers
Mesa Oaks, California


Lambert Azimuthal Equal-Area
15' 00" Graticule Spacing
0.5 MV/M CONTOURS OF KNBR AND KGO ENCOMPASS ENTIRE MAP
KXCL(FM)
KKCY(FM)
KRFD-FM
KPAY 5.612 MV/M
KMYC 7.804 MV/M
KXCL(FM)
KUBA 4.714 MV/M
KEWE(FM)
KFBK 0.5 MV/M
KOBO 27.318 MV/M
KRAK-FM
KGBY(FM)
KRXQ(FM)
KQPT(FM)
KSTE 6.349 MV/M
KSMJ 6.702 MV/M
KEBR 8.777 MV/M
KSSJ(FM)
KPPL(FM)
KRAK 3.483 MV/M
KUIC(FM)
KYMX(FM)
KAHI 13.402 MV/M
KSFM(FM)
KCTC 10.526 MV/M
KQBR(FM)
KFRC 2.611 MV/M
KNCI(FM)
KHYL(FM)
KIQS-FM DUNNIGAN 60 DBU CONTOUR
KXOA-FM
KXOA 9.612 MV/M
KWOD(FM)
KSEG(FM)
Lodoga
Sites
Maxwell
Colusa
West Butte
Williams
Meridian
Sutter
Tierra Buena
Marysville
Yuba City
Sycamore
Alicia
Olivehurst
Arboga
Grimes
Oswald
Arbuckle
College City
Everglade
Horstville
Sheridan
Rumsey
Dunnigan
Kirkville
East Nicolaus
Trowbridge
Nicolaus
Robbins
Knoxville
Guinda
Zamora
Knights Landing
Brooks
Capay
Esparto
Madison
Woodland
Yolo
King Farms
Rio Linda
Elverta
Robla
Aetna Springs
Citrona
Winters
El Rio Villa
Davis
El Macero
Oak Park
Saint Helena
Rutherford
Oakville
Allendale
Freeport
Biggs
East Biggs
Gridley
East Gridley
Bangor
Dobbins
North San Juan
North Bloomfield
Relief
Oregon House
Pinchville
Honcut
Loma Rica
Pennington
Live Oak
Browns Valley
Mooney Flat
Bitney Corner
Hammonton
Casey Corner
Boston Ravine
Cherry Creek Acres
Iowa Hill
Colfax
Dew Drop
Pinecroft
Twin Pines
Meadow Vista
Clipper Gap
Auburn
Greenwood
Loomis
Rocklin
Pilot Hill
Colama
Foothill Farms
Folsom
Shingle Springs
CENTER OF MAP:
N LAT 38 55' 48.00"
W LON 121 41' 45.00"
Scale 1 : 573,461
EXHIBIT E-6C
OTHER AURAL SERVICES WITHIN
KIQS-FM PROPOSED GAIN AREA
AT DUNNIGAN, CALIFORNIA
AREAS SERVED BY 7 STATIONS
KILOMETERS
0 10 20 30 40
0 5 10 15 20
STATUTE MILES
LAWRENCE L. MORTON ASSOCIATES
Telecommunications Engineers
Mesa Oaks, California


Lambert Azimuthal Equal-Area
15' 00" Graticule Spacing
0.5 MV/M CONTOURS OF KNBR AND KGO ENCOMPASS ENTIRE MAP
KXCL(FM)
KKCY(FM)
KRFD-FM
KPAY 5.612 MV/M
KGBY(FM)
KPPL(FM)
KUIC(FM)
KYMX(FM)
KSFM(FM)
KFRC 2.611 MV/M
KIQS-FM DUNNIGAN 60 DBU CONTOUR
KXOA-FM
KSEG(FM)
KMYC 7.804 MV/M
KXCL(FM)
KOBO 27.318 MV/M
KQBR(FM)
KNCI(FM)
KCTC 10.526 MV/M
KHYL(FM)
KXOA 9.612 MV/M
KWOD(FM)
KUBA 4.714 MV/M
KFBK 0.5 MV/M
KRAK-FM
KEWE(FM)
KRXQ(FM)
KQPT(FM)
KSTE 6.349 MV/M
KSMJ 6.702 MV/M
KEBR 8.777 MV/M
KSSJ(FM)
KRAK 3.483 MV/M
KAHI 13.402 MV/M
Dunnigan
Lodoga
Sites
Maxwell
Colusa
West Butte
Williams
Meridian
Sycamore
Pennington
Live Oak
Biggs
East Biggs
Gridley
East Gridley
Honcut
Bangor
Oregon House
Dobbins
North San Juan
North Bloomfield
Relief
Pinchville
Loma Rica
Browns Valley
Mooney Flat
Bitney Corner
Hammonton
Cusey Corner
Boston Ravine
Sutter
Tierra Buena
Marysville
Linda
Olivehurst
Arboga
Alicia
Grimes
Oswald
Arbuckle
College City
Everglade
Sheridan
Horstville
Cherry Creek Acres
Iowa Hill
Colfax
Dew Drop
Pinecroft
Twin Pines
Meadow Vista
Clipper Gap
Greenwood
Auburn
Humsey
Kirkville
East Nicolaus
Nicolaus
Trowbridge
Robbins
Knoxville
Gunda
Zamora
Knights Landing
Loomis
Rocklin
Pilot Hill
Colama
Brooks
Capay
Yolo
King Farms
Riego
Elverta
Rio Linda
Foothill Farms
Folsom
Esparto
Madison
Woodland
Robla
Shingle Springs
Aetna Springs
Citrona
Broderick
Davis
El Macero
Oak Park
El Rio Villa
Winters
Saint Helena
Rutherford
Oakville
Allendale
Freeport
CENTER OF MAP:
N LAT 38 55' 48.00"
W LON 121 41' 45.00"
Scale 1 : 573,461
EXHIBIT E-6D
OTHER AURAL SERVICES WITHIN
KIQS-FM PROPOSED GAIN AREA
AT DUNNIGAN, CALIFORNIA
AREAS SERVED BY 8 STATIONS
KILOMETERS
0 10 20 30 40
0 5 10 15 20
STATUTE MILES
LAWRENCE L. MORTON ASSOCIATES
Telecommunications Engineers
Mesa Oaks, California


Lambert Azimuthal Equal-Area
15' 00" Graticule Spacing
0.5 MV/M CONTOURS OF KNBR AND KGO ENCOMPASS ENTIRE MAP
KXCL(FM)
KKCY(FM)
KMYC 7.804 MV/M
KUBA 4.714 MV/M
KEWE(FM)
KXCL(FM)
KRFD-FM
KFBK 0.5 MV/M
KPAY 5.612 MV/M
KOBO 27.318 MV/M
KRAK-FM
KGBY(FM)
KRXQ(FM)
KQPT(FM)
KSTE 6.349 MV/M
KSMJ 6.702 MV/M
KEBR 8.777 MV/M
KSSJ(FM)
KPPL(FM)
KRAK 3.483 MV/M
KAHI 13.402 MV/M
KUIC(FM)
KYMX(FM)
KCTC 10.526 MV/M
KSFM(FM)
KQBR(FM)
KFRC 2.611 MV/M
KNCI(FM)
KHYL(FM)
KIQS-FM DUNNIGAN 60 DBU CONTOUR
KXOA-FM
KXOA 9.612 MV/M
KWOD(FM)
KSEG(FM)
Dunnigan
Biggs
East Biggs
East Gridley
Gridley
Bangor
Dobbins
North San Juan
North Bloomfield
Relief
Oregon House
Birchville
Honcut
Loma Rica
Lodoga
Sites
Maxwell
Pennington
Live Oak
Browns Valley
Colusa
Mooney Flat
Bitney Corner
Hammonton
Casey Corner
Boston Ravine
West Butte
Sutter
Williams
Meridian
Tierra Buena
Marysville
Linda
South Yuba
Sycamore
Alicia
Cherry Creek Acres
Iowa Hill
Grimes
Olivehurst
Colfax
Dew Drop
Oswald
Arboga
Pinecroft
Horstville
Twin Pines
Arbuckle
Meadow Vista
College City
Everglade
Sheridan
Clipper Gap
Kirkville
East Nicolaus
Trowbridge
Auburn
Greenwood
Rumsey
Nicolaus
Robbins
Pilot Hill
Knoxville
Guinda
Loomis
Knights Landing
Zamora
Rocklin
Coloma
Brooks
Riego
Yolo
King Farms
Capay
Elverta
Rio Linda
Foothill Farms
Folsom
Esparto
Madison
Woodland
Shingle Springs
Aetna Springs
Robla
Citrona
Broderick
Davis
Oak Park
El Rio Villa
El Macero
Saint Helena
Winters
Rutherford
Oakville
Allendale
Freeport
80
99
70
49
20
5
113
65
16
505
50
880
128
CENTER OF MAP:
N LAT 38 55' 48.00"
W LON 121 41' 45.00"
Scale 1 : 573,461
EXHIBIT E-6E
OTHER AURAL SERVICES WITHIN
KIQS-FM PROPOSED GAIN AREA
AT DUNNIGAN, CALIFORNIA
AREAS SERVED BY 9 STATIONS
KILOMETERS
0
10
20
30
40
0
5
10
15
20
STATUTE MILES
LAWRENCE L. MORTON ASSOCIATES
Telecommunications Engineers
Mesa Oaks, California


Lambert Azimuthal Equal-Area
15' 00" Graticule Spacing
0.5 MV/M CONTOURS OF KNBR AND KGO ENCOMPASS ENTIRE MAP
KXCL(FM)
KKCY(FM)
KMYC 7.804 MV/M
KUBA 4.714 MV/M
KEWE(FM)
KXCL(FM)
KRFD-FM
KFBK 0.5 MV/M
KPAY 5.612 MV/M
KOBO 27.318 MV/M
KRAK-FM
KGBY(FM)
KRXQ(FM)
KQPT(FM)
KSTE 6.349 MV/M
KSMJ 6.702 MV/M
KEBR 8.777 MV/M
KSSJ(FM)
KPPL(FM)
KRAK 3.483 MV/M
KAHI 13.402 MV/M
KUIC(FM)
KYMX(FM)
KSFM(FM)
KCTC 10.526 MV/M
KQBR(FM)
KFRC 2.611 MV/M
KNCI(FM)
KHYL(FM)
KIQS-FM DUNNIGAN 60 DBU CONTOUR
KXOA-FM
KXOA 9.612 MV/M
KWOD(FM)
KSEG(FM)
Dunnigan
Biggs
East Biggs
East Gridley
Gridley
Bangor
Dobbins
North San Juan
Oregon House
Birchville
North Bloomfield
Relief
Honcut
Loma Rica
Lodoga
Sites
Maxwell
Pennington
Live Oak
Browns Valley
Mooney Flat
Bitney Corner
Colusa
West Butte
Hammonton
Casey Corner
Boston Ravine
Williams
Sutter
Meridian
Tierra Buena
Marysville
Yuba City
South Yuba
Linda
Sycamore
Alicia
Cherry Creek Acres
Iowa Hill
Colfax
Grimes
Olivehurst
Oswald
Arboga
Dew Drop
Pinecroft
Twin Pines
Horstville
Arbuckle
College City
Everglade
Sheridan
Meadow Vista
Clipper Gap
Rumsey
Kirkville
East Nicolaus
Nicolaus
Trowbridge
Auburn
Greenwood
Robbins
Pilot Hill
Knoxville
Guinda
Zamora
Knights Landing
Loomis
Rocklin
Coloma
Brooks
Yolo
King Farms
Riego
Capay
Elverta
Rio Linda
Foothill Farms
Folsom
Esparto
Madison
Woodland
Robla
Shingle Springs
Aetna Springs
Citrona
Broderick
El Rio Villa
Davis
El Macero
Oak Park
Winters
Saint Helena
Rutherford
Oakville
Allendale
Freeport
80
70
99
49
20
5
113
65
16
505
50
880
128
CENTER OF MAP:
N LAT 38 55' 48.00"
W LON 121 41' 45.00"
Scale 1 : 573,461
EXHIBIT E-6F
OTHER AURAL SERVICES WITHIN
KIQS-FM PROPOSED GAIN AREA
AT DUNNIGAN, CALIFORNIA
AREAS SERVED BY 10 STATIONS
KILOMETERS
0 10 20 30 40
0 5 10 15 20
STATUTE MILES
LAWRENCE L. MORTON ASSOCIATES
Telecommunications Engineers
Mesa Oaks, California


Lambert Azimuthal Equal-Area
15' 00" Graticule Spacing
0.5 MV/M CONTOURS OF KNBR AND KGO ENCOMPASS ENTIRE MAP
KXCL(FM)
KKCY(FM)
KRFD-FM
KPAY 5.612 MV/M
KMYC 7.804 MV/M
KXCL(FM)
KUBA 4.714 MV/M
KEWE(FM)
KFBK 0.5 MV/M
KOBO 27.318 MV/M
KRAK-FM
KGBY(FM)
KRXQ(FM)
KQPT(FM)
KSTE 6.349 MV/M
KSMJ 6.702 MV/M
KEBR 8.777 MV/M
KSSJ(FM)
KPPL(FM)
KRAK 3.483 MV/M
KAHI 13.402 MV/M
KUIC(FM)
KYMX(FM)
KSFM(FM)
KFRC 2.611 MV/M
KCTC 10.526 MV/M
KQBR(FM)
KNCI(FM)
KHYL(FM)
KIQS-FM DUNNIGAN 60 DBU CONTOUR
KXOA-FM
KXOA 9.612 MV/M
KWOD(FM)
KSEG(FM)
Dunnigan
Lodoga
Sites
Maxwell
Colusa
West Butte
Williams
Meridian
Sycamore
Grimes
Arbuckle
College City
Everglade
Kirkville
Rumsey
Knoxville
Guinda
Brooks
Capay
Esparto
Madison
Woodland
Yolo
King Farms
Zamora
Knights Landing
Robbins
East Nicolaus
Nicolaus
Trowbridge
Riego
Elverta
Rio Linda
Robla
Foothill Farms
Folsom
Shingle Springs
Citrona
Aetna Springs
Saint Helena
Rutherford
Oakville
El Rio Villa
Winters
Davis
El Macero
Oak Park
Broderick
Freeport
Allendale
Biggs
East Biggs
East Gridley
Gridley
Bangor
Honcut
Oregon House
Dobbins
North San Juan
North Bloomfield
Relief
Birchville
Loma Rica
Pennington
Live Oak
Browns Valley
Mooney Flat
Bitney Corner
Hammonton
Casey Corner
Boston Ravine
Marysville
Linda
Alicia
Olivehurst
Arboga
Oswald
Horstville
Sheridan
Cherry Creek Acres
Iowa Hill
Colfax
Dew Drop
Pinecroft
Twin Pines
Meadow Vista
Clipper Gap
Auburn
Greenwood
Loomis
Rocklin
Pilot Hill
Coloma
CENTER OF MAP:
N LAT 38 55' 48.00"
W LON 121 41' 45.00"
Scale 1 : 573,461
EXHIBIT E-6G
OTHER AURAL SERVICES WITHIN
KIQS-FM PROPOSED GAIN AREA
AT DUNNIGAN, CALIFORNIA
AREAS SERVED BY 11 STATIONS
KILOMETERS
0 10 20 30 40
0 5 10 15 20
STATUTE MILES
LAWRENCE L. MORTON ASSOCIATES
Telecommunications Engineers
Mesa Oaks, California